Gang Li

List of Publications by Year
in descending order

220 papers	64,701 citations	4370 86 h-index	1851 209 g-index
225 all docs	225 docs citations	225 times ranked	32422 citing authors

#	Article	IF	Citations
1	Interface engineering of highly efficient perovskite solar cells. Science, 2014, 345, 542-546.	6.0	5,936
2	High-efficiency solution processable polymer photovoltaic cells by self-organization of polymer blends. Nature Materials, 2005, 4, 864-868.	13.3	5,281
3	Polymer solar cells. Nature Photonics, 2012, 6, 153-161.	15.6	4,041
4	For the Bright Futureâ€"Bulk Heterojunction Polymer Solar Cells with Power Conversion Efficiency of 7.4%. Advanced Materials, 2010, 22, E135-8.	11.1	3,509
5	Polymer solar cells with enhanced open-circuit voltage and efficiency. Nature Photonics, 2009, 3, 649-653.	15.6	3,015
6	A polymer tandem solar cell with 10.6% power conversion efficiency. Nature Communications, 2013, 4, 1446.	5.8	2,612
7	Solution-processed hybrid perovskite photodetectors with high detectivity. Nature Communications, 2014, 5, 5404.	5.8	2,214
8	Planar Heterojunction Perovskite Solar Cells via Vapor-Assisted Solution Process. Journal of the American Chemical Society, 2014, 136, 622-625.	6.6	2,091
9	Next-generation organic photovoltaics based on non-fullerene acceptors. Nature Photonics, 2018, 12, 131-142.	15.6	1,535
10	Tandem polymer solar cells featuring a spectrally matched low-bandgap polymer. Nature Photonics, 2012, 6, 180-185.	15.6	1,374
11	Highly Efficient Solar Cell Polymers Developed via Fine-Tuning of Structural and Electronic Properties. Journal of the American Chemical Society, 2009, 131, 7792-7799.	6.6	1,339
12	Recent Progress in Polymer Solar Cells: Manipulation of Polymer:Fullerene Morphology and the Formation of Efficient Inverted Polymer Solar Cells. Advanced Materials, 2009, 21, 1434-1449.	11.1	1,211
13	On the mechanism of conductivity enhancement in poly(3,4-ethylenedioxythiophene):poly(styrene) Tj ETQq1 1 0.784314 rgBT /Overlo	1.8	1,161
14	Synthesis, Characterization, and Photovoltaic Properties of a Low Band Gap Polymer Based on Silole-Containing Polythiophenes and 2,1,3-Benzothiadiazole. Journal of the American Chemical Society, 2008, 130, 16144-16145.	6.6	1,092
15	â€œSolvent Annealingâ€•Effect in Polymer Solar Cells Based on Poly(3-hexylthiophene) and Methanofullerenes. Advanced Functional Materials, 2007, 17, 1636-1644.	7.8	1,091
16	25th Anniversary Article: A Decade of Organic/Polymeric Photovoltaic Research. Advanced Materials, 2013, 25, 6642-6671.	11.1	1,055
17	Low-Bandgap Near-IR Conjugated Polymers/Molecules for Organic Electronics. Chemical Reviews, 2015, 115, 12633-12665.	23.0	1,029
18	Transition metal oxides as the buffer layer for polymer photovoltaic cells. Applied Physics Letters, 2006, 88, 073508.	1.5	953

#	Article	IF	Citations
19	Development of New Semiconducting Polymers for High Performance Solar Cells. Journal of the American Chemical Society, 2009, 131, 56-57.	6.6	904
20	Single Crystal Formamidinium Lead Iodide (FAPbI₃): Insight into the Structural, Optical, and Electrical Properties. Advanced Materials, 2016, 28, 2253-2258.	11.1	781
21	Efficient inverted polymer solar cells. Applied Physics Letters, 2006, 88, 253503.	1.5	743
22	Investigation of annealing effects and film thickness dependence of polymer solar cells based on poly(3-hexylthiophene). Journal of Applied Physics, 2005, 98, 043704.	1.1	730
23	Synthesis of a Low Band Gap Polymer and Its Application in Highly Efficient Polymer Solar Cells. Journal of the American Chemical Society, 2009, 131, 15586-15587.	6.6	688
24	Moisture assisted perovskite film growth for high performance solar cells. Applied Physics Letters, 2014, 105, .	1.5	667
25	Vertical Phase Separation in Poly(3â€hexylthiophene): Fullerene Derivative Blends and its Advantage for Inverted Structure Solar Cells. Advanced Functional Materials, 2009, 19, 1227-1234.	7.8	650
26	Effects of Solvent Mixtures on the Nanoscale Phase Separation in Polymer Solar Cells. Advanced Functional Materials, 2008, 18, 1783-1789.	7.8	645
27	Synthesis of Fluorinated Polythienothiophene-<i>co</i>-benzodithiophenes and Effect of Fluorination on the Photovoltaic Properties. Journal of the American Chemical Society, 2011, 133, 1885-1894.	6.6	548
28	Solution-processed small-molecule solar cells: breaking the 10% power conversion efficiency. Scientific Reports, 2013, 3, 3356.	1.6	542
29	High-efficiency robust perovskite solar cells on ultrathin flexible substrates. Nature Communications, 2016, 7, 10214.	5.8	534
30	Systematic Investigation of Benzodithiophene- and Diketopyrrolopyrrole-Based Low-Bandgap Polymers Designed for Single Junction and Tandem Polymer Solar Cells. Journal of the American Chemical Society, 2012, 134, 10071-10079.	6.6	530
31	Accurate Measurement and Characterization of Organic Solar Cells. Advanced Functional Materials, 2006, 16, 2016-2023.	7.8	506
32	Visibly Transparent Polymer Solar Cells Produced by Solution Processing. ACS Nano, 2012, 6, 7185-7190.	7.3	492
33	High-performance multiple-donor bulk heterojunction solar cells. Nature Photonics, 2015, 9, 190-198.	15.6	489
34	Highly efficient inverted polymer solar cell by low temperature annealing of Cs2CO3 interlayer. Applied Physics Letters, 2008, 92, .	1.5	447
35	10.2% Power Conversion Efficiency Polymer Tandem Solar Cells Consisting of Two Identical Subâ€Cells. Advanced Materials, 2013, 25, 3973-3978.	11.1	419
36	Achieving High-Efficiency Polymer White-Light-Emitting Devices. Advanced Materials, 2006, 18, 114-117.	11.1	411

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37	Manipulating regioregular poly(3-hexylthiophene) : [6,6]-phenyl-C61-butyric acid methyl ester blendsâ€”route towards high efficiency polymer solar cells. Journal of Materials Chemistry, 2007, 17, 3126.	6.7	351
38	Fused Silver Nanowires with Metal Oxide Nanoparticles and Organic Polymers for Highly Transparent Conductors. ACS Nano, 2011, 5, 9877-9882.	7.3	348
39	Metal Oxide Nanoparticles as an Electronâ€Transport Layer in Highâ€Performance and Stable Inverted Polymer Solar Cells. Advanced Materials, 2012, 24, 5267-5272.	11.1	333
40	Effective Carrierâ€Concentration Tuning of SnO₂ Quantum Dot Electronâ€Selective Layers for Highâ€Performance Planar Perovskite Solar Cells. Advanced Materials, 2018, 30, e1706023.	11.1	333
41	Effect of self-organization in polymer/fullerene bulk heterojunctions on solar cell performance. Applied Physics Letters, 2006, 89, 063505.	1.5	331
42	Highly Efficient Tandem Polymer Photovoltaic Cells. Advanced Materials, 2010, 22, 380-383.	11.1	320
43	Nanoscale Joule Heating and Electromigration Enhanced Ripening of Silver Nanowire Contacts. ACS Nano, 2014, 8, 2804-2811.	7.3	320
44	A Semiâ€transparent Plastic Solar Cell Fabricated by a Lamination Process. Advanced Materials, 2008, 20, 415-419.	11.1	308
45	Low-bandgap conjugated polymers enabling solution-processable tandem solar cells. Nature Reviews Materials, 2017, 2, .	23.3	284
46	Absorption spectra modification in poly(3-hexylthiophene):methanofullerene blend thin films. Chemical Physics Letters, 2005, 411, 138-143.	1.2	269
47	Stable and low-photovoltage-loss perovskite solar cells by multifunctional passivation. Nature Photonics, 2021, 15, 681-689.	15.6	255
48	Recent trends in polymer tandem solar cells research. Progress in Polymer Science, 2013, 38, 1909-1928.	11.8	246
49	Stable and Efficient Organoâ€Metal Halide Hybrid Perovskite Solar Cells via Ï€â€Conjugated Lewis Base Polymer Induced Trap Passivation and Charge Extraction. Advanced Materials, 2018, 30, e1706126.	11.1	241
50	16% efficiency all-polymer organic solar cells enabled by a finely tuned morphology via the design of ternary blend. Joule, 2021, 5, 914-930.	11.7	228
51	Transparent Polymer Photovoltaics for Solar Energy Harvesting and Beyond. Joule, 2018, 2, 1039-1054.	11.7	211
52	Control of the nanoscale crystallinity and phase separation in polymer solar cells. Applied Physics Letters, 2008, 92, 103306.	1.5	196
53	Efficient light harvesting in multiple-device stacked structure for polymer solar cells. Applied Physics Letters, 2006, 88, 064104.	1.5	193
54	Pure Formamidiniumâ€Based Perovskite Lightâ€Emitting Diodes with High Efficiency and Low Driving Voltage. Advanced Materials, 2017, 29, 1603826.	11.1	179

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55	Fast-Grown Interpenetrating Network in Poly(3-hexylthiophene): Methanofullerenes Solar Cells Processed with Additive. Journal of Physical Chemistry C, 2009, 113, 7946-7953.	1.5	174
56	High-performance semi-transparent polymer solar cells possessing tandem structures. Energy and Environmental Science, 2013, 6, 2714.	15.6	170
57	Additive-induced miscibility regulation and hierarchical morphology enable 17.5% binary organic solar cells. Energy and Environmental Science, 2021, 14, 3044-3052.	15.6	170
58	Combinatorial fabrication and studies of bright white organic light-emitting devices based on emission from rubrene-doped 4,4â€²-bis(2,2â€²-diphenylvinyl)-1,1â€²-biphenyl. Applied Physics Letters, 2003, 83, 5359-5361.	1.5	169
59	Doping of the Metal Oxide Nanostructure and its Influence in Organic Electronics. Advanced Functional Materials, 2009, 19, 1241-1246.	7.8	169
60	Solution-processable antimony-based light-absorbing materials beyond lead halide perovskites. Journal of Materials Chemistry A, 2017, 5, 20843-20850.	5.2	169
61	Concurrent improvement in <i>J</i>_{SC} and <i>V</i>_{OC} in high-efficiency ternary organic solar cells enabled by a red-absorbing small-molecule acceptor with a high LUMO level. Energy and Environmental Science, 2020, 13, 2115-2123.	15.6	164
62	Highâ€Performance Organic Bulkâ€Heterojunction Solar Cells Based on Multipleâ€Donor or Multipleâ€Acceptor Components. Advanced Materials, 2018, 30, 1705706.	11.1	161
63	Surface Plasmon and Scatteringâ€Enhanced Lowâ€Bandgap Polymer Solar Cell by a Metal Grating Back Electrode. Advanced Energy Materials, 2012, 2, 1203-1207.	10.2	160
64	Recent progress in morphology optimization in perovskite solar cell. Journal of Materials Chemistry A, 2020, 8, 21356-21386.	5.2	159
65	Perovskite/polymer monolithic hybrid tandem solar cells utilizing a low-temperature, full solution process. Materials Horizons, 2015, 2, 203-211.	6.4	148
66	Integrated Perovskite/Bulk-Heterojunction toward Efficient Solar Cells. Nano Letters, 2015, 15, 662-668.	4.5	145
67	Energy level alignment of poly(3-hexylthiophene): [6,6]-phenyl C61 butyric acid methyl ester bulk heterojunction. Applied Physics Letters, 2009, 95, 013301.	1.5	142
68	Photovoltaic Performance of Vapor-Assisted Solution-Processed Layer Polymorph of Cs₃Sb₂I₉. ACS Applied Materials & Interfaces, 2018, 10, 2566-2573.	4.0	137
69	Zwitterionic-Surfactant-Assisted Room-Temperature Coating of Efficient Perovskite Solar Cells. Joule, 2020, 4, 2404-2425.	11.7	137
70	Graded bulk-heterojunction enables 17% binary organic solar cells via nonhalogenated open air coating. Nature Communications, 2021, 12, 4815.	5.8	135
71	Tuning acceptor energy level for efficient charge collection in copper-phthalocyanine-based organic solar cells. Applied Physics Letters, 2006, 88, 153504.	1.5	132
72	Influence of composition and heat-treatment on the charge transport properties of poly(3-hexylthiophene) and [6,6]-phenyl C61-butyric acid methyl ester blends. Applied Physics Letters, 2005, 87, 112105.	1.5	127

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73	Manipulating the Mixedâ€Perovskite Crystallization Pathway Unveiled by In Situ GIWAXS. Advanced Materials, 2019, 31, e1901284.	11.1	127
74	High efficiency polymer solar cells with vertically modulated nanoscale morphology. Nanotechnology, 2009, 20, 165202.	1.3	122
75	Precise Control of Perovskite Crystallization Kinetics via Sequential Aâ€Site Doping. Advanced Materials, 2020, 32, e2004630.	11.1	122
76	Effective Color Tuning in Organic Light-Emitting Diodes Based on Aluminum Tris(5-aryl-8-hydroxyquinoline) Complexes. Advanced Materials, 2004, 16, 2001-2003.	11.1	117
77	Nucleation and crystal growth control for scalable solution-processed organicâ€“inorganic hybrid perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 1578-1603.	5.2	112
78	High-Efficiency Ternary Organic Solar Cells with a Good Figure-of-Merit Enabled by Two Low-Cost Donor Polymers. ACS Energy Letters, 2022, 7, 2547-2556.	8.8	109
79	Effects of C70 derivative in low band gap polymer photovoltaic devices: Spectral complementation and morphology optimization. Applied Physics Letters, 2006, 89, 153507.	1.5	106
80	Multifunctional Crosslinkingâ€Enabled Strainâ€Regulating Crystallization for Stable, Efficient Î±â€FAPbI₃â€Based Perovskite Solar Cells. Advanced Materials, 2021, 33, e2008487.	11.1	106
81	Delicate Morphology Control Triggers 14.7% Efficiency Allâ€Smallâ€Molecule Organic Solar Cells. Advanced Energy Materials, 2020, 10, 2001076.	10.2	100
82	Electrostatic Selfâ€Assembly Conjugated Polyelectrolyteâ€Surfactant Complex as an Interlayer for High Performance Polymer Solar Cells. Advanced Functional Materials, 2012, 22, 3284-3289.	7.8	97
83	Solutionâ€Processed Small Molecules Using Different Electron Linkers for Highâ€Performance Solar Cells. Advanced Materials, 2013, 25, 4657-4662.	11.1	96
84	Ag-Doped Halide Perovskite Nanocrystals for Tunable Band Structure and Efficient Charge Transport. ACS Energy Letters, 2019, 4, 534-541.	8.8	96
85	Donor Derivative Incorporation: An Effective Strategy toward High Performance Allâ€Smallâ€Molecule Ternary Organic Solar Cells. Advanced Science, 2019, 6, 1901613.	5.6	93
86	Roomâ€Temperature Meniscus Coating of >20% Perovskite Solar Cells: A Film Formation Mechanism Investigation. Advanced Functional Materials, 2019, 29, 1900092.	7.8	92
87	Relating Recombination, Density of States, and Device Performance in an Efficient Polymer:Fullerene Organic Solar Cell Blend. Advanced Energy Materials, 2013, 3, 1201-1209.	10.2	89
88	Improving the power efficiency of white light-emitting diode by doping electron transport material. Applied Physics Letters, 2006, 89, 133509.	1.5	87
89	Allâ€polymer solar cells with over 16% efficiency and enhanced stability enabled by compatible solvent and polymer additives. Aggregate, 2022, 3, e58.	5.2	85
90	<i>In situ</i>and<i>ex situ</i>investigations on ternary strategy and co-solvent effects towards high-efficiency organic solar cells. Energy and Environmental Science, 2022, 15, 2479-2488.	15.6	84

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91	A Lewis Baseâ€Assisted Passivation Strategy Towards Highly Efficient and Stable Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800055.	3.1	83
92	Unraveling the High Open Circuit Voltage and High Performance of Integrated Perovskite/Organic Bulk-Heterojunction Solar Cells. Nano Letters, 2017, 17, 5140-5147.	4.5	78
93	The study of solvent additive effects in efficient polymer photovoltaics via impedance spectroscopy. Solar Energy Materials and Solar Cells, 2014, 130, 20-26.	3.0	75
94	Recent progress of all-polymer solar cells â€" From chemical structure and device physics to photovoltaic performance. Materials Science and Engineering Reports, 2020, 140, 100542.	14.8	75
95	Lead-Free Antimony-Based Light-Emitting Diodes through the Vaporâ€"Anion-Exchange Method. ACS Applied Materials & Interfaces, 2019, 11, 35088-35094.	4.0	74
96	Benzodithiophene-Based Small-Molecule Donors for Next-Generation All-Small-Molecule Organic Photovoltaics. Matter, 2020, 3, 1403-1432.	5.0	72
97	Origin of Radiationâ€Induced Degradation in Polymer Solar Cells. Advanced Functional Materials, 2010, 20, 2729-2736.	7.8	70
98	Eutectic phase behavior induced by a simple additive contributes to efficient organic solar cells. Nano Energy, 2021, 84, 105862.	8.2	70
99	High-Performance Rigid and Flexible Perovskite Solar Cells with Low-Temperature Solution-Processable Binary Metal Oxide Hole-Transporting Materials. Solar Rrl, 2017, 1, 1700058.	3.1	69
100	Printable Solar Cells from Advanced Solution-Processible Materials. CheM, 2016, 1, 197-219.	5.8	68
101	Synergy of Liquidâ€Crystalline Smallâ€Molecule and Polymeric Donors Delivers Uncommon Morphology Evolution and 16.6% Efficiency Organic Photovoltaics. Advanced Science, 2020, 7, 2000149.	5.6	67
102	Single phase, high hole mobility Cu₂O films as an efficient and robust hole transporting layer for organic solar cells. Journal of Materials Chemistry A, 2017, 5, 11055-11062.	5.2	65
103	Manipulating Crystallization Kinetics in Highâ€Performance Bladeâ€Coated Perovskite Solar Cells via Cosolventâ€Assisted Phase Transition. Advanced Materials, 2022, 34, e2200276.	11.1	64
104	Vertical organic light emitting transistor. Applied Physics Letters, 2007, 91, .	1.5	62
105	A Selenophene Containing Benzodithiophene-<i>alt</i>-thienothiophene Polymer for Additive-Free High Performance Solar Cell. Macromolecules, 2015, 48, 562-568.	2.2	59
106	Potassium-intercalated rubrene as a dual-functional passivation agent for high efficiency perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 1824-1834.	5.2	59
107	Airâ€Processed Efficient Organic Solar Cells from Aromatic Hydrocarbon Solvent without Solvent Additive or Postâ€Treatment: Insights into Solvent Effect on Morphology. Energy and Environmental Materials, 2022, 5, 977-985.	7.3	59
108	Facile synthesis of composite tin oxide nanostructures for high-performance planar perovskite solar cells. Nano Energy, 2019, 60, 275-284.	8.2	57

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109	Novel Oligomer Enables Green Solvent Processed 17.5% Ternary Organic Solar Cells: Synergistic Energy Loss Reduction and Morphology Fineâ€Tuning. Advanced Materials, 2022, 34, e2107659.	11.1	57
110	Functional Third Components in Nonfullerene Acceptor-Based Ternary Organic Solar Cells. Accounts of Materials Research, 2020, 1, 158-171.	5.9	56
111	Abnormal Synergetic Effect of Organic and Halide Ions on the Stability and Optoelectronic Properties of a Mixed Perovskite via In Situ Characterizations. Advanced Materials, 2018, 30, e1801562.	11.1	55
112	Band tail recombination in polymer:fullerene organic solar cells. Journal of Applied Physics, 2014, 116, 074503.	1.1	53
113	Stretchable ITOâ€Free Organic Solar Cells with Intrinsic Antiâ€Reflection Substrate for Highâ€Efficiency Outdoor and Indoor Energy Harvesting. Advanced Functional Materials, 2021, 31, 2010172.	7.8	53
114	Elucidating Double Aggregation Mechanisms in the Morphology Optimization of Diketopyrrolopyrroleâ€Based Narrow Bandgap Polymer Solar Cells. Advanced Materials, 2014, 26, 3142-3147.	11.1	52
115	Transition metal oxides as hole-transporting materials in organic semiconductor and hybrid perovskite based solar cells. Science China Chemistry, 2017, 60, 472-489.	4.2	52
116	Stabilizer-assisted growth of formamdinium-based perovskites for highly efficient and stable planar solar cells with over 22% efficiency. Nano Energy, 2019, 63, 103835.	8.2	51
117	A Novel Wideâ€Bandgap Polymer with Deep Ionization Potential Enables Exceeding 16% Efficiency in Ternary Nonfullerene Polymer Solar Cells. Advanced Functional Materials, 2020, 30, 1910466.	7.8	50
118	Emerging Strategies toward Mechanically Robust Organic Photovoltaics: Focus on Active Layer. Advanced Energy Materials, 2022, 12, .	10.2	50
119	Electronic Structure and Transition Energies in Polymerâ€"Fullerene Bulk Heterojunctions. Journal of Physical Chemistry C, 2014, 118, 21873-21883.	1.5	48
120	Lead Halide Perovskite Based Microdisk Lasers for Onâ€Chip Integrated Photonic Circuits. Advanced Optical Materials, 2018, 6, 1701266.	3.6	48
121	A Cryogenic Process for Antisolventâ€Free Highâ€Performance Perovskite Solar Cells. Advanced Materials, 2018, 30, e1804402.	11.1	47
122	Excited-State Symmetry-Breaking Charge Separation Dynamics in Multibranched Perylene Diimide Molecules. Journal of Physical Chemistry Letters, 2020, 11, 10329-10339.	2.1	46
123	10.5% efficient polymer and amorphous silicon hybrid tandem photovoltaic cell. Nature Communications, 2015, 6, 6391.	5.8	45
124	One-step, low-temperature deposited perovskite solar cell utilizing small molecule additive. Journal of Photonics for Energy, 2015, 5, 057405.	0.8	45
125	Intermediate Layers in Tandem Organic Solar Cells. Green, 2011, 1, .	0.4	44
126	Simple Is Best: A <i>p</i>-Phenylene Bridging Methoxydiphenylamine-Substituted Carbazole Hole Transporter for High-Performance Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 30065-30071.	4.0	44

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127	Bottomâ€Up Quasiâ€Epitaxial Growth of Hybrid Perovskite from Solution Processâ€"Achieving Highâ€Efficiency Solar Cells via Templateâ€‹â€Guided Crystallization. Advanced Materials, 2021, 33, e2100009.	11.1	44
128	Magnetic resonance studies of tris-(8-hydroxyquinoline) aluminum-based organic light-emitting devices. Physical Review B, 2004, 69, .	1.1	43
129	The investigation of donor-acceptor compatibility in bulk-heterojunction polymer systems. Applied Physics Letters, 2013, 103, .	1.5	43
130	Improving Structural Order for a Highâ€Performance Diketopyrrolopyrroleâ€Based Polymer Solar Cell with a Thick Active Layer. Advanced Energy Materials, 2014, 4, 1300739.	10.2	43
131	Vitrification Transformation of Poly(Ethylene Oxide) Activating Interface Passivation for Highâ€Efficiency Perovskite Solar Cells. Solar Rrl, 2019, 3, 1900134.	3.1	43
132	Printing Highâ€Efficiency Perovskite Solar Cells in Highâ€Humidity Ambient Environmentâ€"An In Situ Guided Investigation. Advanced Science, 2021, 8, 2003359.	5.6	40
133	Room-temperature multiple ligands-tailored SnO2 quantum dots endow in situ dual-interface binding for upscaling efficient perovskite photovoltaics with high VOC. Light: Science and Applications, 2021, 10, 239.	7.7	40
134	Tin oxide (SnO2) as effective electron selective layer material in hybrid organicâ€"inorganic metal halide perovskite solar cells. Journal of Energy Chemistry, 2018, 27, 962-970.	7.1	39
135	Efficient modulation of end groups for the asymmetric small molecule acceptors enabling organic solar cells with over 15% efficiency. Journal of Materials Chemistry A, 2020, 8, 5927-5935.	5.2	39
136	1,1-Dicyanomethylene-3-Indanone End-Cap Engineering for Fused-Ring Electron Acceptor-Based High-Performance Organic Photovoltaics. Cell Reports Physical Science, 2021, 2, 100292.	2.8	38
137	Aperiodic band-pass electrode enables record-performance transparent organic photovoltaics. Joule, 2022, 6, 1918-1930.	11.7	38
138	Enhanced Electron Transport and Heat Transfer Boost Light Stability of Ternary Organic Photovoltaic Cells Incorporating Nonâ€Fullerene Small Molecule and Polymer Acceptors. Advanced Electronic Materials, 2019, 5, 1900497.	2.6	37
139	A novel ball milling technique for room temperature processing of TiO₂ nanoparticles employed as the electron transport layer in perovskite solar cells and modules. Journal of Materials Chemistry A, 2018, 6, 7114-7122.	5.2	35
140	18.42% efficiency polymer solar cells enabled by terpolymer donors with optimal miscibility and energy levels. Journal of Materials Chemistry A, 2022, 10, 7878-7887.	5.2	34
141	Radiation induced damage and recovery in poly(3-hexyl thiophene) based polymer solar cells. Nanotechnology, 2008, 19, 424014.	1.3	33
142	High performance low band gap polymer solar cells with a non-conventional acceptor. Chemical Communications, 2012, 48, 7616.	2.2	33
143	Efficient Slantwise Aligned Dionâ€"Jacobson Phase Perovskite Solar Cells Based on Transâ€1,4â€Cyclohexanediamine. Small, 2020, 16, e2003098.	5.2	33
144	Combinatorial study of exciplex formation at the interface between two wide band gap organic semiconductors. Applied Physics Letters, 2006, 88, 253505.	1.5	32

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145	Novel fullerene acceptors: synthesis and application in low band gap polymer solar cells. Journal of Materials Chemistry, 2012, 22, 13391.	6.7	31
146	Observing electron transport and percolation in selected bulk heterojunctions bearing fullerene derivatives, non-fullerene small molecules, and polymeric acceptors. Nano Energy, 2019, 64, 103950.	8.2	31
147	Highly Crystalline Near-Infrared Acceptor Enabling Simultaneous Efficiency and Photostability Boosting in High-Performance Ternary Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 48095-48102.	4.0	30
148	Perovskite Quantum Wells Formation Mechanism for Stable Efficient Perovskite Photovoltaicsâ€"A Realâ€Time Phaseâ€Transition Study. Advanced Materials, 2021, 33, e2006238.	11.1	30
149	Rollâ€toâ€Roll Production of Graphene Hybrid Electrodes for Highâ€Efficiency, Flexible Organic Photoelectronics. Advanced Materials Interfaces, 2015, 2, 1500445.	1.9	29
150	ITCâ€2Cl: A Versatile Middleâ€Bandgap Nonfullerene Acceptor for Highâ€Efficiency Panchromatic Ternary Organic Solar Cells. Solar Rrl, 2020, 4, 1900377.	3.1	29
151	Combining Fusedâ€Ring and Unfusedâ€Core Electron Acceptors Enables Efficient Ternary Organic Solar Cells with Enhanced Fill Factor and Broad Compositional Tolerance. Solar Rrl, 2019, 3, 1900317.	3.1	28
152	Electrical transport in amorphous semiconducting AlMgB14 films. Applied Physics Letters, 2004, 85, 1181-1183.	1.5	27
153	Design of wide-bandgap polymers with deeper ionization potential enables efficient ternary non-fullerene polymer solar cells with 13% efficiency. Journal of Materials Chemistry A, 2019, 7, 14153-14162.	5.2	27
154	Deciphering the Role of Fluorination: Morphological Manipulation Prompts Charge Separation and Reduces Carrier Recombination in Allâ€Smallâ€Molecule Photovoltaics. Solar Rrl, 2020, 4, 1900528.	3.1	27
155	Efficient Flexible Perovskite Solar Cells Using Low-Cost Cu Top and Bottom Electrodes. ACS Applied Materials & Interfaces, 2020, 12, 26050-26059.	4.0	26
156	Interfacial Engineering of Cu₂O Passivating Contact for Efficient Crystalline Silicon Solar Cells with an Al₂O₃ Passivation Layer. ACS Applied Materials & Interfaces, 2021, 13, 28415-28423.	4.0	25
157	High-efficiency solution processable polymer photovoltaic cells by self-organization of polymer blends. , 2010, , 80-84.		24
158	Transient Magnetophotoinduced Absorption Studies of Photoexcitations in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ï€</mml:mi></mml:math> -Conjugated Donor-Acceptor Copolymers. Physical Review Letters, 2017, 119, 017401.	2.9	23
159	Charge carrier transport and nanomorphology control for efficient non-fullerene organic solar cells. Materials Today Energy, 2019, 12, 398-407.	2.5	23
160	Reducing <scp><i>V</i>_{OC}</scp> loss via structure compatible and high <scp>lowest unoccupied molecular orbital</scp> nonfullerene acceptors for over 17%â€efficiency ternary organic photovoltaics. EcoMat, 2020, 2, e12061.	6.8	23
161	Uncovering the out-of-plane nanomorphology of organic photovoltaic bulk heterojunction by GTSAXS. Nature Communications, 2021, 12, 6226.	5.8	23
162	ZnO electron transporting layer engineering realized over 20% efficiency and over 1.28 V openâ€circuit voltage in allâ€inorganic perovskite solar cells. EcoMat, 2022, 4, .	6.8	23

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